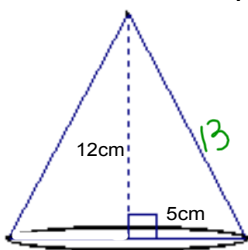
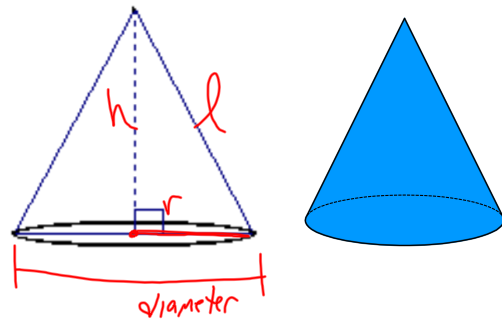


Fr. Quiz

Pys → Cones 9.3 and 9.5

Area and Volume of Cones

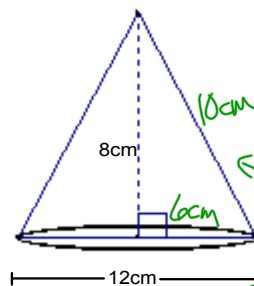


Formulas:

$$\begin{aligned} LA &= \frac{1}{2} p l \\ SA &= LA + B \\ V &= \frac{1}{3} B h \end{aligned}$$

$$\begin{aligned} C^2 &= a^2 + b^2 \\ l^2 &= h^2 + r^2 \\ l^2 &= 12^2 + 5^2 \\ &= 144 + 25 \end{aligned}$$

$$\begin{aligned} p &= 2\pi r = 2\pi 5 = 10\pi \\ B &= \pi r^2 = \pi 5^2 = 25\pi \\ LA &= \frac{1}{2} p l = \frac{1}{2} 10\pi 13 = 65\pi \\ SA &= LA + B = 25\pi + 65\pi = 90\pi \\ V &= \frac{1}{3} B h = \frac{1}{3} 25\pi 12 = 100\pi \end{aligned}$$



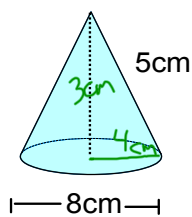
Formulas:

$$\begin{aligned} LA &= \frac{1}{2} p l \\ SA &= LA + B \\ V &= \frac{1}{3} B h \end{aligned}$$

$$\begin{aligned} l^2 &= 8^2 + 6^2 \\ l^2 &= 64 + 36 \\ l &= 10 \\ p &= 2\pi 6 = 12\pi \approx 37.7 \text{ cm} \\ B &= \pi 6^2 = 36\pi \approx 113.1 \text{ cm}^2 \\ LA &= \frac{1}{2} 12\pi 10 = 60\pi \approx 188.5 \text{ cm}^2 \\ SA &= 60\pi + 36\pi = 96\pi \approx 301.6 \text{ cm}^2 \\ V &= \frac{1}{3} 36\pi 8 = 96\pi \approx 301.6 \text{ cm}^3 \end{aligned}$$

Formulas:

$LA = \frac{1}{2} p l$ $SA = LA + B$ $V = \frac{1}{3} Bh$



$$\begin{aligned} * 5^2 &= 4^2 + h^2 \\ 25 &= 16 + h^2 \\ -16 &\quad -16 \end{aligned}$$

$$\sqrt{9} = h^2$$

$$3 = h$$

$$\begin{aligned} P &= 2\pi r = 8\pi \\ B &= \pi r^2 = 16\pi \\ LA &= \frac{1}{2} p l = 20\pi \\ SA &= 36\pi \\ V &= \frac{1}{3} B h = 16\pi \end{aligned}$$

Assignment:

p495-496

13, 23-25, 28 p, B, LA, and SA

p514

17-19